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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/757,893

01/15/2004

John O. Ruid

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06/15/2006

DUANE MORRIS, LLP

IP DEPARTMENT

30 SOUTH 17TH STREET

PHILADELPHIA, PA 19103-4196

EXAMINER

PATTERSON, MARC A

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/757,893	Applicant(s) RUID ET AL.	
	Examiner Marc A. Patterson	Art Unit 1772	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 and 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### WITHDRAWN REJECTIONS

1. The 35 U.S.C. 103(a) rejection of Claims 1 – 16 as being unpatentable over Matthews et al (U.S. Patent No. 6,148,867) in view of Noonan et al (U.S. Patent No. 5,783,268), of record on page 2 of the previous Action, is withdrawn.

### NEW REJECTIONS

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 16 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews et al (U.S. Patent No. 6,148,867) in view of Beer et al (U.S. Patent No. 5,910,458).

With regard to Claims 1 – 3 and 5, Matthews et al disclose a duct board material (column 1, lines 66 – 67; column 2, lines 1 – 13), comprising a fiber glass board having a density of 3.5 pounds per cubic foot (column 5, lines 11 – 19), a facing adhered to an exterior surface (a foil – scrim – kraft facing; column 5, lines 5 – 10) and a bonded, non – woven mat facing adhered to an interior surface (column 4, lines 45 – 57). Matthews et al fail to disclose a glass mat which has a plurality of parallel fibers oriented in a longitudinal direction of the duct board material.

Beer et al teach a mat (column 5, lines 39 – 41) comprising glass (column 6, lines 33 – 35) having a plurality of parallel fibers oriented in a longitudinal direction of the mat (column 6,

lines 41 – 45; the fibers are therefore parallel, and the facing therefore comprises parallel yarns embedded in the facing and preferentially oriented) for the purpose of obtaining a mat facing having decreased fabrication time (column 5, lines 45 – 50). One of ordinary skill in the art would therefore have recognized the advantage of providing for the facing of Beer et al in Matthews et al, which comprises a mat, depending on the desired fabrication time of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a glass mat which has a plurality of parallel fibers oriented in a longitudinal direction of the duct board material in Matthews et al in order to obtain a mat facing having decreased fabrication time as taught by Beer et al; the addition of the mat to the duct board makes the mat a layer of the duct board material, and the fibers are therefore oriented in a direction of a layer of the duct board material.

With regard to Claim 4, Beer et al do not teach a facing which comprises slack; Beer et al therefore teach yarns embedded in the facing without slack.

With regard to Claim 6, the mat facing taught by Beer et al is a polyester mat (column 3, line 18), and therefore has a ratio of machine direction tensile strength to cross direction tensile strength of at least 2:1.

With regard to Claims 7 – 8, Matthews et al disclose an exterior facing comprising a foil – scrim – kraft facing (column 5, lines 5 – 7) and Matthews et al teach the interchangeability of a foil composite and a non – woven mat as facings (column 4, lines 51 – 57) and therefore teach an exterior facing which is a second bonded, non – woven mat.

With regard to Claims 9 – 12 and 14 – 16, the non – woven mat taught by Beer et al includes glass filaments in a resinous binder (polyester; column 3, line 18).

With regard to Claim 13, the mat disclosed by Matthews et al is adhered to the duct board using an adhesive (tape; column 5, line 64).

With regard to Claim 32, the duct disclosed by Matthews et al is rectangular (column 4, lines 8 – 10).

#### ANSWERS TO APPLICANT'S ARGUMENTS

4. Applicant's arguments regarding the 35 U.S.C. 103(a) rejection of Claims 1 – 16 as being unpatentable over Matthews et al (U.S. Patent No. 6,148,867) in view of Noonan et al (U.S. Patent No. 5,783,268), of record in the previous Action, have been considered and have been found to be persuasive. The rejections are therefore withdrawn. The new rejection above is directed to amended Claims 1 – 16 and 32.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497. The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Marc Patterson* 6/12/06  
Marc A. Patterson, PhD.  
Primary Examiner  
Art Unit 1772